

AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims

Claims 1-46 (Canceled).

Claim 47 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 8, which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 48 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence of SEQ ID NO. 9, which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 49 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 2, which is covalently

linked to at least one polyethylene glycol (PEG) molecule, wherein the administration of
the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in
the subject to below 10 μ M for at least 3 days.

Claim 50 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies,
comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I
polypeptide~~The method of claim 28, wherein the modified, full-length recombinant human arginase I~~
~~polypeptide has~~ having the amino acid sequence of SEQ ID NO. 3, which is covalently linked to at least one
polyethylene glycol (PEG) molecule, wherein the administration of the modified, full-length recombinant human
arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 51 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies,
comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I
polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43,~~
~~wherein the modified, full-length recombinant human arginase I polypeptide has~~ having an amino acid sequence
encoded by a nucleic acid of SEQ ID NO. 8, which is covalently linked to at least one polyethylene glycol (PEG)
molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide
reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 52 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies,
comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I
polypeptide of 80-100% purity as determined by gel chromatography and densitometry,~~The method of claim 43,~~
~~wherein the modified, full-length recombinant human arginase I polypeptide has~~ having the amino acid sequence
of SEQ ID NO. 9 which is covalently linked to at least one polyethylene glycol (PEG) molecule, wherein the

administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 53 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43,~~
wherein the modified, full-length recombinant human arginase I polypeptide has having an amino acid sequence encoded by a nucleic acid of SEQ ID NO. 2, which is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 54 (Currently amended): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide of 80-100% purity as determined by gel chromatography and densitometry~~The method of claim 43,~~
wherein the modified, full-length recombinant human arginase I polypeptide has having the amino acid sequence of SEQ ID NO. 3, which is covalently linked to at least one polyethylene glycol (PEG) molecule wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.

Claim 55 (Previously presented): A method of treatment of human liver, breast, colon or rectal malignancies, comprising administering to a subject in need thereof a modified, full-length recombinant human arginase I polypeptide comprising the amino acid sequence of SEQ ID NO. 3 which is of 80-100% purity, covalently linked to at least one polyethylene glycol (PEG) molecule, and has an extended half-life of at least 3 days.

Claim 56 (Previously presented): The method of claim 55, wherein the administration of the modified, full-length recombinant human arginase I polypeptide reduces the physiological arginine level in the subject to below 10 μ M for at least 3 days.